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BCAS2 Antibody

Catalog # ASC11076

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O75934
Other Accession	CAG46834, 49457027
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26131
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BCAS2 antibody can be used for detection of BCAS2 by Western blot at 0.5 - 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	10286
Other Names	Pre-mRNA-splicing factor SPF27, Breast carcinoma-amplified sequence 2, DNA amplified in mammary carcinoma 1 protein, Spliceosome-associated protein SPF 27, BCAS2, DAM1
Target/Specificity	BCAS2;
Reconstitution & Storage	BCAS2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	BCAS2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BCAS2
Synonyms	DAM1 {ECO:0000303|PubMed:10403562}
Function	Required for pre-mRNA splicing as component of the activated spliceosome (PubMed:28076346, PubMed:28502770, PubMed:29301961, PubMed:29360106, PubMed:30705154). Component of the PRP19-CDC5L complex that forms an integral part of the spliceosome and is required for activating pre-mRNA splicing. May have a scaffolding role in the spliceosome assembly as it contacts all other components of the core complex. The

	PRP19-CDC5L complex may also play a role in the response to DNA damage (DDR).
Cellular Location	Nucleus. Nucleus, nucleolus
Tissue Location	Ubiquitously expressed.

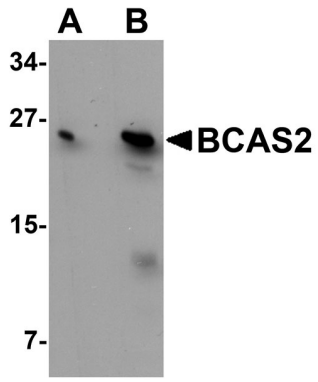
Background

BCAS2 Antibody: BCAS2 was identified through differential display analysis as an mRNA species that was overexpressed in MCF7 and BT-20 breast cancer cell lines. The chromosomal region containing this gene, 1p13.3021, is amplified in these cells lines. BCAS2 is a transcriptional cofactor that enhances estrogen receptor-mediated gene expression, and directly interacts with the tumor suppressor p53 to reduce p53 transcriptional activity by reducing p53 protein level in the absence of DNA damage. Deprivation of BCAS2 through RNA inhibition induces apoptosis in p53-wild type cells, but causes G2-M arrest in p53-null or -mutant cells; this effect was reversed with the expression of ectopic BCAS2. BCAS2 may thus be potentially useful as a therapeutic target in the treatment of cancer.

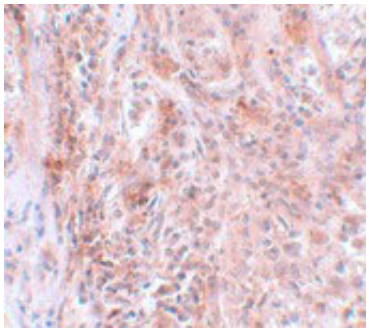
References

Nagasaki K, Maass N, Manabe T, et al. Identification of a novel gene, DAM1, amplified at chromosome 1p13.3-21 region in human breast cancer cell lines. Cancer Lett.1999; 140:219-26.
Qi C, Zhu YT, Chang J, et al. Potentiation of estrogen receptor transcriptional activity by breast cancer amplified sequence Biochem. Biophys. Res. Commun.2005; 328:393-8.
Huo PC, Tsao YP, Chang HW, et al. Breast cancer amplified sequence 2, a novel negative regulator of the p53 tumor suppressor. Cancer Res.2009; 69:8877-85.

Images

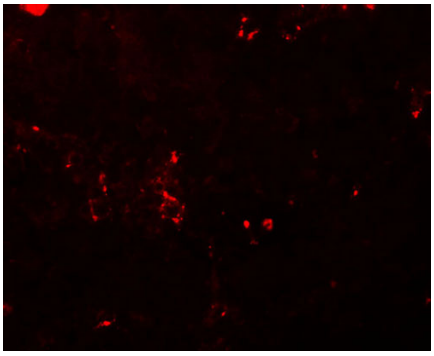


Western blot analysis of BCAS2 in MCF7 cell lysate with BCAS2 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of BCAS2 in human breast carcinoma with BCAS2 antibody at 5 µg/mL.

Immunofluorescence of BCAS2 in human breast carcinoma tissue with BCAS2 antibody at 20 µg/mL.



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